

JOINT REPORT
ON THE
SURVEY AND REMONUMENTING OF THE QUEBEC-NEW YORK
INTERNATIONAL BOUNDARY.

W. F. King, Chief Astronomer (Canada).

Edward A. Bond, State Engineer and Surveyor, New York (U.S.).

10th January, 1903.

We, the undersigned, EDWARD A. BOND, of Albany, State Engineer and Surveyor of New York, and WILLIAM F. KING, of Ottawa, Chief Astronomer of the Department of the Interior of Canada, representing the State of New York and the Dominion of Canada respectively in the work of the resurvey of the international boundary line between the United States and the Dominion of Canada, from the Richelieu to the St. Lawrence river, and the renewal of the monuments marking the same, beg to report as follows upon the operations conducted under our direction.

The line under consideration, between the rivers above named, forms part of the northern boundary of the state of New York and of the southern boundary of the province of Quebec. The boundary between the United States and Canada in this region was described by the first article of the Treaty of Washington, August 9, 1842, as following, from Hal's stream, a tributary of the Connecticut river, to the St. Lawrence, the line surveyed previous to 1774 by Valentine and Collins as the 45th parallel.

A few words as to the history of this definition may not be out of place here. The 45th parallel of north latitude was named as the northern boundary of a certain grant by James I. in 1606. Again, by Royal Proclamation of 1763, and Order in Council of 1768, the same parallel of latitude was designated as the boundary between the provinces of New York and Quebec in this quarter. A survey of the 45th parallel was made in the years 1771-74 by Messrs. Valentine and Collins, to form the line between the provinces.

By the second article of the Treaty of Paris, 1783, the boundaries of the United States were described thus:—

‘From the north-west angle of Nova Scotia, viz., that angle which is formed by a line drawn due north from the source of Saint Croix river to the Highlands; along the said Highlands which divide those rivers which empty themselves into the River St. Lawrence, from those which fall into the Atlantic ocean, to the north-westernmost head of Connecticut river; thence down along the middle of that river, to the forty-fifth degree of north latitude; from thence by a line due west on said latitude, until it strikes the river Iroquois or Cataraquay.’

By the fifth article of the Treaty of Ghent, 1814, the description contained in the above treaty, as regards the eastern portion of the land boundary from the source of the St. Croix to the St. Lawrence river, was confirmed, and provision was made for the appointment of commissioners to survey and mark the line.

The commissioners appointed under this article failed to agree. Besides the difficulties in interpretation which arose relative to the 'North-west angle of Nova Scotia,' and the 'Highlands,' and which were the subject of controversy for more than twenty years afterwards, the commissioners found that the line surveyed and laid out by Valentine and Collins did not coincide with the 45th parallel. It was 151 feet north of it at the St. Lawrence river; it crossed the parallel southward four miles east of the St. Lawrence, running 2,506 feet south of it at 17½ miles east of the St. Lawrence; again crossing the parallel to the northward at 35 miles east of the St. Lawrence, it was 4,200 feet north of it at the outlet of Lake Champlain.

The commissioners having reported their failure to agree upon any part of the eastern portion of the land boundary, further negotiations were entered into by the two governments, resulting in the reference of the matter to the King of the Netherlands, by treaty of 1827.

The award under this treaty, given on January 10, 1831, as regards the New York and Vermont part of the line, again designated the 45th parallel, but with a diversion to the north at the west side of the Richelieu river, so as to include in New York Fort Montgomery, which had been erected by the United States north of the true parallel but south of the Valentine and Collins line, which at this point was 4,200 feet north of latitude 45°.

The award of the King of the Netherlands having been rejected, the question was again opened up, and was not finally settled until the treaty of August 9, 1842.

By this treaty the line of Valentine and Collins was reverted to as the international boundary.

In 1843 Lt.-Col. Estcourt and Mr. Albert Smith were appointed commissioners under article I. of the treaty of 1842, to survey and mark the boundary line from the source of the St. Croix to the St. Lawrence river. They laid down the New York portion of the boundary in the year 1845. Their final joint report was dated June 28, 1847. They marked the line with cast-iron monuments, a description of which will be found in the annexed report of Messrs. Bigger and Willis. The commissioners, with their report, filed plans and field notes of their survey. Certified copies of these field notes were procured by us, for use in our operations, in March last from the War Department in Washington, where the originals are on record, together with copies of a tabular statement showing the deflection angles and distances between monuments, with the data procured by Lieut. Thom, U.S.A., from a resurvey made in 1851. Appendix No. 1.

The Laws of New York, chapter 421 of 1887, section 2, provide for an examination in that year, and every three years thereafter, under the direction of the State Engineer and Surveyor, of all monuments on the boundary lines of the state, and also for a replacing and resetting, in co-operation with the authorities of adjacent states, of such monuments as may be found injured or displaced.

Under this law, examinations of the monuments along the Canadian boundary have been made every three years since 1887. The examination of 1890 was participated in by an officer appointed by the government of Canada.

While very serious deterioration of the monuments placed in 1845 was then observed, subsequent examinations showed progressive falling off in their condition until the necessity of repair or renewal of the monuments became urgent.

In 1889, Mr. Bond, State Engineer and Surveyor of New York, called the attention of the government of Canada, through the Minister of the Interior, to the matter, suggesting another joint examination. Subsequently, the Governor of the state of New York, at the instance of the State Engineer, wrote to the Secretary of State of the United States, stating the necessities of the case. Appendices Nos. 2 and 10.

The Canadian government was unwilling to enter upon an examination of the monuments without provision for their renewal where found necessary, and this, it was thought, could not properly be undertaken except in conjunction with the United States government. Appendix No. 5.

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In May, 1900, the government of Canada, by Minute of Council, proposed, through the usual diplomatic channels, a joint examination and repair of monuments along the whole of the boundary line between the United States and Canada. Appendix No. 5.

The United States government did not, at the time, accede to this proposal; but, in October, 1900, the Secretary of State transmitted, through the British ambassador, the proposal of the state of New York, with an expressison of his concurrence in the same. Appendix No. 7.

On January 5, 1901, the government of Canada expressed their willingness to co-operate with the state of New York, now that the agreement of the United States government had been secured, but suggesting that the scope of the proposed operations be enlarged so as to cover the whole of the eastern part of the boundary. Appendix No. 8.

On July 15, 1901, the Secretary of State of the United States, at the request of the Governor of New York, again brought the matter to the attention of the British ambassador, stating the necessity of speedy action, and on August 16 the government of Canada replied by Minute acceding to the proposal. Appendices Nos. 13 and 11.

At the beginning of September, Mr. Bond was authorized by the Governor of the state to open negotiations with the Department of the Interior of Canada, and on the 28th of that month the Canadian government appointed Mr. W. F. King as their Commissioner, with authority to make arrangements for the prosecution of the field work. Appendices Nos. 15, 16 and 19.

The Commissioners thus appointed decided, before proceeding with the replacing of the monuments, to have a careful examination of the existing monuments made, and for that purpose, and for such further field operations as should be found necessary, appointed representatives: the State Engineer appointing Mr. H. P. Willis, of Schenectady, and the Canadian Commissioner Mr. C. A. Bigger, of Ottawa, in October, 1901.

These gentlemen went over the line in October and November, 1901. After consideration of their report, it was thought advisable to replace all the old monuments by new ones. After considering various forms of iron and steel monuments, we decided to adopt granite with concrete base, and also to make a precise survey of the whole line.

Tenders were called for, both in Canada and the United States, for the construction of these monuments, to be delivered at certain railway stations near the work on or before March 1, 1902. The tenders were opened on January 5, 1902, and the contract was awarded to E. R. Fletcher, of Hardwick, Vermont, whose tender was the lowest.

The monuments are 6 feet in length, the lower portion of the stone having an ashlar face, 12 inches square, for 1 foot of its length. From this point for a distance of 4 feet 7½ inches, the stone tapers from 12 inches to 9 inches on each side, with each corner having a bevelled face of ½-inch wide. The remaining 4½ inches at the top is dressed in the form of a pyramid.

It was decided that they should be set in concrete bases, 3 feet square, and averaging 4 feet 6 inches in the ground and 9 inches above the surface. One foot of the granite stone was embedded in the concrete. The upper surface of the concrete was given a slope to turn rain, and on it was imprinted the lettering, as follows:—

On the south side, 'U.S.'

On the north side, 'Canada.'

On the west side, 'Treaty 1842.'

On the east side, the number of the monument, with 'Renewed 1902.'

In the case of the new monuments, the word 'renewed' was omitted, and the letter A followed the number.

The actual field work was begun by Messrs. Bigger and Willis on June 3, near Rouse's Point, and the last monument was set on or about October 12. The line survey continued later, and some of the astronomical work yet remains to be done. A full

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account of the field work will be found in the annexed report by Messrs. Bigger and Willis. Appendix No. 1.

We recommend that the new monuments be accepted as marking the true line between Canada and the United States, as under the 1st article of the treaty of the 9th August, 1842. We further recommend that periodical inspections, with repair if necessary, be made jointly by the government of the United States and Canada.

Copies of correspondence relating to the agreement under which our work was done, diagram showing the form and dimensions of the new monuments, and copy of the report of Messrs. Bigger and Willis, are submitted herewith. Appendix No. 23.

Signed in duplicate at Albany, in the state of New York, this tenth day of January, 1903.

EDWARD A. BOND,

State Engineer and Surveyor.

W. F. KING,

Chief Astronomer.

List of appendices to joint report by W. F. King (Canada), and Hon. Edward A. Bond (U.S.), on the survey and remonumenting of the Quebec-New York international boundary:—

- 1.—Report by Messrs. Bigger and Willis.
1899
- 2.—May 9. Bond to Deville.—Proposes joint inspection.
- 3.—May 15. Deville to Bond.—Formal acknowledgment.
1900
- 4.—Mch. 2. Bond to Deville.—Reopens question.
- 5.—May 26. Order in Council.—Canada willing to join United States in examination and repair of whole of southern boundary.
- 6.—Oct. 23. Bond to Hay.—Wants State Department to take up matter with Canada.
- 7.—Oct. 29. Hay to Bond.—Has submitted matter to H.M. Ambassador. No new convention necessary.
1901
- 8.—Jan. 5. Order in Council.—Objection now removed. Canada willing to co-operate, but suggests that scope of operations be enlarged.
- 9.—Aug. 5. Odell to Bond.—Transmitting copy letter from Adee.
- 10.—Aug. 3. Adee to Governor N.Y.—No reply from H.M. Ambassador.
- 11.—Aug. 16. Order in Council—Concurrence with proposal of United States Secretary State as to demarcation of limited portion of line.
- 12.—July 17. Lowther to Minto.—Transmits note from United States government.
- 13.—July 15. Hay to Lowther.—Gratification at assent of Canada to general survey and repair of whole line, but suggests limited operations.
- 14.—Jan. 12. Pauncefote to Minto.—Acknowledges O. in C. intimating willingness of Canada to join in demarcation of Quebec-N.Y. line.
- 15.—Sept. 2. Graham to Bond.—Transmitting letter.
- 16.—Aug. 30. Adee to Governor N.Y.—Canada concurs in Governor's proposal *re* Quebec-N.Y. line. State Engineer may be put in communication with Department Interior.
- 17.—Sept. 4. Bond to Odell.—Has taken matter up with Department of the Interior, Canada.
- 18.—Sept. 4. Bond to Deville.—Submits form of agreement for joint operations.
- 19.—Sept. 28. Order in Council.—Recommending appointment of Mr. W. F. King, Chief Astronomer, as Commissioner on behalf of Canada.
- 20.—Sept. 2. Lowther to Minto.—Transmits copy of note from United States government.
- 21.—Aug. 30.—Adee to Lowther.—Has notified Governor of N.Y. of Canada's assent to restoration of monuments on New York-Quebec line.
- 22.—Copy of agreement for inspection, restoring and replacing of interstate boundary monuments, signed by Edward A. Bond, New York, and James W. Latta, Pennsylvania.
- 23.—Diagram, showing form and dimensions of new granite monuments.

APPENDIX No. 1.

HON. EDWARD A. BOND,
State Engineer and Surveyor,
Commissioner for the State of New York.

WILLIAM F. KING, Esq.,
Chief Astronomer, Department of the Interior,
Commissisoner for Canada.

When in October, 1901, we were directed by you to make an examination of the boundary line between the state of New York and Canada, we met at Rouse's Point on the 22nd day of that month, and began our work at monument No. 645, near the west bank of the Richelieu river, and followed the line westerly to the St. Lawrence river, which was reached on November 8.

The monuments marking this section of the line were, with two exceptions, hollow cast-iron pillars, 6 feet long, the lower half in the ground being 6 inches square, with projecting flanges at the bottom, the upper half above the ground tapering to 4 inches, the top closed in the form of a pyramid.

These monuments were set under the direction of Commissioners appointed pursuant to the Treaty of Washington concluded August 9th, eighteen hundred and forty-two. The names of the Commissioners, &c., in large projecting letters appear vertically on the sides of the monument as follows:—

North side, J. B. Estcourt.

South side, Albert Smith.

East side, Treaty of Washington.

West side, Boundary Aug. 9th, 1842.

In our examination of October, 1901, we found the location and the condition of these monuments briefly as follows:—

No. 645 lay in about 2 feet of water, and 100 feet out from the westerly shore of the Richelieu river. This monument is much larger than those described above.

No. 646 is a large cut-stone monument, standing plumb, and is in excellent condition. There are inscriptions on the several sides, giving the names of the Commissioners, the Astronomer and his assistant, the countries divided, the latitude, 45 00 42'8; longitude, 73 21 27, and the date of the treaty.

No. 647 stood on the south side of an east and west road, 49 feet west of a north and south road, and about 66 feet west of the centre line of the Grand Trunk Railway; leaning 10 inches or 12 inches south, loose in the ground, and cracked down the south-west corner.

No. 648 on the east side of a highway running north and south, and on the south side of the westerly extremity of a road from the east; leaning north-westerly at an angle of 45 degrees, and cracked down the south-east corner.

No. 649 standing diagonally to line, about 8 feet south of a ditch, and 100 feet east of cedar, elm and maple second-growth on the south side of the line; in perfect condition, but leaning 8 inches or 10 inches south, and quite loose in the ground.

No. 650, about 25 feet west of the west side of a north and south road; entirely out of the ground. The original site was pointed out by parties living in that vicinity, and was indicated by a group of small field stone, about 9 feet east of an open shed.

No. 651, on the north side of a rail fence, leaning 6 inches south, and not firm; is in good condition; land is cultivated on both sides of the line. Monument about 212 feet west of a fence running south and 294 feet west of a fence running north.

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No. 652 in a rail fence in timber, and standing diagonally to line; condition perfect.

No. 653 in a north and south highway, about 7 feet west of the easterly limit thereof. There is a road on the Canada side of the line from this point west.

No. 654 about 15 feet west of east side of a north and south road, and in line with a stone fence which forms the southerly boundary of a road from the east, terminating at this point; monument leaning north-west, but in good condition.

No. 655 in an opening in the centre of a stone fence, leaning south, otherwise in good condition; on the westerly slope of high ground, and about 153 feet west of a stone fence running south.

No. 656 in dense swamp, about 500 feet west of the present easterly limit; diagonal to line; leaning 6 inches or 8 inches to the east, and in good condition.

No. 657 in a rail fence on a summit about 680 feet east of the highway; leaning 18 inches north-east, but in perfect condition.

No. 658 on the south bank of a ditch, and projecting about 2 feet 6 inches above the surface; the north and part of the east side to the depth of 17 inches below the top broken out; a creek crosses the line about 120 feet west of the monument.

No. 659 on the west side of a private road locally known as Lucas's road; about 4 feet west of the centre line of a stone fence running south and about 5 feet north of the northerly end thereof; leaning a few inches east, but solid and in good condition.

No. 660 near the west side of a travelled road in line with a rail fence running west, and 57 feet 6 inches north of the northeast corner of a brick dwelling house owned by James Toner.

No. 661 on the west side of Upton's road, standing plumb, and in excellent condition.

No. 662 in south side of brush fence in mixed timber, principally cedar; monument leaning 8 inches or 10 inches south, but in perfect condition; about 10 feet south and 20 feet east of a large poplar.

No. 663 in hardwood timber, about 270 feet east of the southeast angle of cleared land on the Canada side; heaved about 4 inches, and not firm; leaning northerly 10 inches or 12 inches, otherwise in good condition.

No. 664, 10 feet east of a rail fence running north, and on the south edge of a rail fence running east and west; loose in the ground and heaved about 3 inches; small triangular piece broken out on the south side.

No. 665 on summit of a narrow ridge; a strip of clearing extends north from the line along the ridge. This monument was broken off close to the ground, the top standing on the cedar core; an old road runs north and south along the ridge.

No. 666 on a slight elevation opposite a small clearing to the south of the line; a second growth of timber continues on the north side of the line; clearing on the south side extends about 150 feet east and about 750 feet west of the post.

No. 667 on a pastured ridge running northeast and southwest; clearing to the north 200 feet wide; clearing on the south commences at this point and extends west; post in perfect condition.

No. 668 on the west side of a highway; heaved 18 inches; loose in the ground, otherwise in perfect condition. A small frame building used as a grocery store stands about 200 feet to the east and on the line; a stone building also occupied as a store and dwelling stands 45 feet or 50 feet to the west of the monument and on the line; names on sign, 'Rose, Jodoin & Son.'

No. 669 in perfect condition; on the southeast angle of a clearing, and diagonal to the line; a rail fence runs north from this monument.

No. 670 in mixed timber, about 250 feet west of a creek, and 350 feet west of the beginning of the timber on the north side of the line; post heaved 15 inches, and very loose in the ground.

No. 671 on a ridge running north and south, and about 40 feet west of a fence running south; heaved 18 inches; and a piece broken out about 3 feet from the top.

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No. 672 on a small knoll in a rail fence, 19 feet east of a wire fence running north; leaning north, and cracked down the southeast corner.

No. 673 in centre of a lane, heaved and almost down; condition perfect.

No. 674 on the west side of Nichol's road; was very loose, and had been heaved considerably; leaning at an angle of 45 degrees, but in perfect condition. Mr. Schrieber's house is on line about 68 feet east of the post.

No. 675 diagonal to line, and in perfect condition; about 25 feet west of the post a board fence runs south, and about 35 feet west a rail fence runs north into Canada.

No. 676 on the top of a bank about 75 feet west of a creek; diagonal to line; heaved 4 inches; loose in the ground, but plumb.

No. 677 on the top of a ridge; broken off below the surface; about 600 feet west of Mr. Richards' clearing.

No. 678 on the northeast slope of a rocky ridge about 10 feet west of a brush fence; diagonal to line; very loose, and heaved 10 inches, but plumb and in good condition.

No. 679 heaved 2 feet, very loose, leaning east; a square section broken out about 3 feet from the top; 150 feet west of the northeast angle of cleared land.

No. 680 at the north end of a rail fence, and due north of a small school-house on the main road. This monument was used as a fence post, a wire fence leading east and west therefrom; heaved 6 inches, loose in the ground, but plumb; badly cracked on the east side.

No. 681 on a high hill near a summit at the northeast angle of a pasture; leaning 6 inches east, heaved 6 inches, and cracked on the west side.

No. 682 on west side of a highway; loose; heaved about 20 inches; leaning 6 inches south; in good condition. Mr. Sheay's barns are on the line a short distance to the west.

No. 683 in thick timber at the top of a steep slope from the east; leaning slightly east and north; heaved 3 inches; solid in the ground, and in perfect condition.

No. 684 on high ground, plumb and firm; heaved 8 inches; a section 21 inches long broken out of the west side; also small hole near the top; a piece 10 inches long broken out of the east side; about 150 feet east of an abandoned clearing; formerly occupied by Robert Story, now owned by Charles Barr.

No. 685 on the summit of a ridge, a few feet east of McDermott's east line; a wire fence to the east and north; post heaved 12 inches, and quite loose in the ground; turned sideways in the hole; badly cracked on east side near the top; had been used as a target; a good winter road passes about 100 feet to the south of the post.

No. 686 on the south slope of the bank of a creek; heaved about 10 inches, quite loose, and leaning 6 inches east and south. A piece 6 inches long was broken out 1 foot below the top; the north side cracked.

No. 687 on a ledge of rock north of and about opposite the centre of the pond in the 'Gulf;' about 20 feet below the summit level, and about 30 feet north of where the ledge breaks off almost vertically. The pond is 100 feet (approximately) below the level of the post, and in a deep gorge, which crosses the line diagonally northwest and southeast. The monument stood 5 feet above the surface, with large pieces of rock around it; quite loose, but plumb, and in perfect condition.

No. 688 on top of what is called Huckleberry Rock on the southwest side of the 'Gulf;' the site was marked by a flat pointed stone on end, surrounded by a number of large flat stones similar to those placed around No. 687. A small piece of the monument was found in the hole.

No. 689 in a depression on high ground about 130 feet west of a cluster of three white birch trees; diagonal to the line; loose in the ground; leaning west 3 inches or 4 inches; heaved 8 inches or 10 inches; otherwise in perfect condition.

No. 690 had been heaved 18 inches; quite loose in the ground, leaning about 15 inches to the west; diagonal to the line; about 200 feet east of Mr. McDowell's road, and 150 feet east of a small meadow to the south of the line.

No. 691 about 40 feet west of a winter road on Woodward Jackson's farm; heaved 18 inches; leaning 18 inches southwest, and quite loose in the ground; otherwise in good

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condition. About 80 feet west of this point a survey post marked XXXXI-XXXII stands about on line, and is intended for a lot line in Canada.

No. 692 on south edge of a good winter road along the line; broken off close to the ground; the top reversed, and standing in the base; the shell varied in thickness from 5-16 to 3-4 of an inch.

No. 693 lying on the ground near a wire fence; its site was marked by a small circle of stones; there is a small clearing to the northeast of the post on the Canada side of the line.

No. 694 on a slight elevation, sloping north and west; diagonal to line; solid in the ground; leaning 3 inches east, and in perfect condition.

No. 695 in a thick second growth, about 20 feet north of a rail fence; pasture to the south of the line, extending to a rail fence 200 feet to the east; about 1,100 feet east of the Clinton Mills road; monument leaning 4 inches east; heaved slightly, but in perfect condition.

No. 696 on high ground in thick hardwood bush, and about 8 feet south of a wire fence; firm in the ground, though heaved 2 inches; leaning southwest about 5 inches.

No. 697 in stone bottom of fence running east and west, and about 3 feet east of a wire fence running north; broken off near the ground, reversed and standing on bottom section; pasture to the south, and woods to the north.

No. 698 in a rail fence, leaning 3 inches north and 4 inches west, solid in the ground, and in perfect condition; cultivated land on both sides of the line; a wire fence runs north into Canada about 130 feet west of the post.

No. 699 on a high ridge opposite a fence running south; heaved 6 inches; leaning 6 inches south, but in good condition.

No. 700 on the top of the east bank of a stream; heaved 8 inches; leaning 10 inches south, and loose in the ground; diagonal to line; in perfect condition. There is a highway known as the Churubusco road about 570 feet east of this monument.

No. 701 about 60 feet west of a wire fence running south; nearly opposite and about 40 feet south of a large ash tree; monument leaning west and south, loose in the ground; heaved 12 inches, but in perfect condition.

No. 702 leaning northeast about 5 inches; diagonal to the line; loose, and heaved about 4 inches; condition perfect. Pasture land to the north and south of the line, and a rail fence leading east.

No. 703 on east side of a road, projecting above ground 2 feet 4 inches; leaning north and west, but is firm; small pieces broken out near the top on the east and west sides. Monument stood 10 feet 6 inches west of a frame store owned by O'Neil Brothers, and had been used as a hitching post.

Nos. 704 and 705 in a field about 12 feet north of a wire fence; they were on the line, and about 8 feet apart; both heaved about 12 inches; No. 704 leaning 12 inches north and 6 inches west; No. 705 leaning about 8 inches or 10 inches west and north, and slightly loose in the ground. The placing of two monuments close together indicates an astronomical station.

No. 706 about 120 feet east of a wire fence on the Canada side; leaning northwest under a tree top, and almost down; condition perfect.

No. 707 in a rail fence about 600 feet west of a highway, and about 90 feet east of a wire fence on the north side; bottom of the post in the ground under a pile of stones; top broken off.

No. 708 about 60 feet east of the northwest angle of a small pasture south of the line; leaning a little south and west; heaved about 6 inches; slightly loose, but in perfect condition.

No. 709 in a rail fence 25 feet west of a wire fence running south and 60 feet east of poplar bush on the Canada side; post leaning north, very loose, and almost down, but in perfect condition.

No. 710 lying on the north side of a rail fence about 360 feet east of travelled road. Some stones had been placed around the hole, which was on the south side of the fence; the post in good condition.

No. 711 upon the east side of the highway; firm in the ground; heaved about 3 inches; leaning 15 inches or 18 inches west; a small hole on the east side near the top; band about $2\frac{1}{2}$ inches wide just below the top; apparently used as a hitching post; in front of brick store owned by J. C. Cook.

No. 712 in a pile of stones on the south side of a rail fence about 60 feet east of a rail fence which runs north into Canada; leaning about 18 inches southwest; firm, and in perfect condition.

No. 713 about 75 feet west of stone fence running south; on the south side of a rail fence; heaved 6 inches; leaning north 8 inches; loose in the ground, with stones piled around the base; cleared land to the north and south of the line.

No. 714 on the east side of the Chateauguay road, 25 feet west of the remains of stone foundation of burned building; Richard Boyd's store stands on the west side of the highway, and is on the line; monument leaning 4 inches north, but solid in the ground, and in good condition.

No. 715 on high ground; heaved 3 inches; leaning 2 inches north, but solid in the ground, and in perfect condition.

No. 716 in low ground 50 feet or 60 feet west of a low ridge; 15 feet south of a brush fence; heaved 3 inches; leaning 6 inches east, and in good condition.

No. 717 diagonal to the line; leaning 5 inches north; solid in the ground, and in good condition; in a wire fence running east and west, and about 80 feet east of a fence running north.

No. 718 on the north side of a wire fence about 200 feet west of the northeast angle of a clearing on the New York side; slightly heaved; leaning 3 inches west, and in perfect condition.

No. 719 on the east side of highway; leaning east 8 inches; heaved 4 inches, with triangular piece broken out of east side near the bottom; bullet hole in the west side; the remains of old stone buildings on line stand about 40 feet west of the monument; it is claimed by those residing in the vicinity that this post had been moved north.

No. 720 in the valley of the Chateauguay river; 10 feet west of the edge of the channel; diagonal to the line; slightly loose; leaning 4 inches north, and, with the exception of a bullet hole in the southwest side, in perfect condition.

No. 721 on the west side of the highway; leaning 8 inches east and north; badly cracked and a piece broken out of the east side; opposite and 5 feet east of the northeast angle of a frame store, owned by Mr. Bush.

No. 722 on the south side of a rail fence on the first knoll west of the highway; diagonal to the line; slightly loose in the ground; heaved 6 inches; leaning north and east about 4 inches; in perfect condition.

No. 723 in wire fence on a ridge in hardwood timber, about 360 feet west of a line in Canada, starting from a survey post marked XVIII on west side, XIX on the east side; monument diagonal to the line; heaved about 3 inches; plumb; two cracks down the southwest side near the top.

No. 724 on knoll 1 foot south of a wire fence in hardwood second growth; heaved 4 inches; slightly loose in the ground, and leaning 3 inches north.

No. 725 about 60 feet west of a wire fence, running south; 15 feet south of a brush fence running west; diagonal to the line; heaved 6 inches; quite loose in the ground, but plumb, and in perfect condition.

No. 726 on dry ground, cleared to the north; small brush to the south; 2 feet south of a wire fence; heaved 6 inches; quite loose, leaning 6 inches south; about 123 feet west of a wire fence running south into New York state, and about 200 feet west of a wire fence running north on the west side of a small cultivated field in Canada.

No. 727 on low ground 1,200 feet west of road and about 200 feet west of clearing on Canada side; in an open place in second growth, and stands 6 feet south of a wire fence; leaning north 4 inches and west 2 inches; heaved 6 inches; solid in the ground, and in perfect condition.

No. 728 on northerly slope of high ground in open hardwood timber; sharply de-

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finer, ridge starting 120 feet northwest and running northeasterly some distance; post diagonal to the line; heaved 7 inches; solid and plumb; piece 12 inches long out of the southwest side, and post badly cracked on the southwest and southeast sides.

No. 729, 55 feet west of a wire fence running north on the west side of a clearing in Canada, and about 55 feet east of Stebbins' creek; cultivated land on the south; post heaved 8 inches, quite loose; leaning 12 inches southwest; in good condition. Mr. Stebbins' barn is nearly opposite, and about 1,200 feet south of this monument.

No. 730 on a dry stony ridge, about 325 feet west of a rail fence running north; pastured land on both sides of the line; post on the north side of a rail fence, in stone pile; firm in the ground, leaning 4 inches south, and in good condition.

No. 731 on south edge of a small pasture in Canada, on east edge of rocky knoll, about 40 feet east of a group of large bushy hemlocks; post broken off diagonally from 18 inches above down to near the surface of the ground; bottom section solid, but heaved 8 inches, and leaning northeast; irregularity in thickness of shell very noticeable.

Nos. 732 and 733 on line about 10 feet apart on the south edge of cultivated land a short distance east of Trout river. Both monuments were leaning northwest, and were almost down; a cluster of elms has grown up between the posts. The placing of these two monuments close together indicates, as already mentioned, an astronomical station.

No. 734 formerly stood on a peninsula in Trout river. The construction of a dam has raised the water so that during spring freshets the site is covered. It does not appear that this monument could usefully be replaced.

No. 735 on Main street in Trout River village, just outside of a two-plank board walk 14 feet 3 inches east of Mr. Dolan's hotel; broken off close to the ground; base apparently in original position; line crosses Main street diagonally, a number of buildings being intersected.

No. 736 on the north side of a rail fence, a short distance west of the village of Trout River; diagonal to the line; heaved 18 inches; leaning northwest at an angle of 30 degrees with horizon, but is in good condition.

No. 737 on top of a stony knoll on the south side of a rail fence; pasture land on both sides of the line; post 16 feet west of a rail fence running south; just north and west of the post, there is a thicket of small cedars; monument diagonal to the line; solid in the ground, plumb, and in good condition.

No. 738 in pasture land 8 feet south of rail fence; at foot of a stony ridge, running southwest; heaved 18 inches; very loose in the ground; leaning 2 feet southwest, but in perfect condition. Some stones had been placed around the base; pasture land extends to the south; cultivated land to the north of the line.

No. 739 was found leaning northwest against a rail fence; bottom in a ditch; the core still in the ground; monument in perfect condition. The land adjacent to the line on both sides is level and cultivated.

No. 740 on the south side of a rail fence 210 feet west of a barn on the Canada side of the line; heaved 8 inches; loose in the ground; leaning 30 inches southwest, but in good condition; cleared land on both sides of the line.

No. 741 on the south side of a rail fence 25 feet west of summit of a rocky ridge; three large trees, a maple, a basswood and a yellow birch stand northeast of the post; monument diagonal to the line; cracked on the northeast side on the top; solid in the ground, and plumb.

No. 742 on the northwest side of a road crossing the boundary diagonally northeast and southwest; heaved 3 inches; plumb, and in good condition. Several buildings belonging to William Amlet stand on the line to the west of the post.

No. 743 in pastured land, about 10 feet north of the west end of a rail fence and the east end of a wire fence; about 6 feet west of a ditch running north; heaved 18 inches; leaning 4 inches south; very loose in the ground and cracked down one corner nearly 2 feet. This post had been turned one quarter around to the east; it was also badly cracked near the bottom.

No. 744, 170 feet west of a creek, 60 feet west of the easterly limit of green timber on the Canada side; heaved 8 inches; leaning 2 feet west; very loose in the ground, but in good condition.

No. 745 at the westerly edge of a bad cedar swamp and at the easterly limit of a rocky ridge; heaved 6 inches; diagonal to the line; leaning 2 inches west; in good condition.

No. 746 heaved 4 inches; leaning south 6 inches; solid in the ground, and in good condition; on high rocky ground on the north side of a rail fence north of an abandoned road, which ends about 60 feet east of the post.

No. 747, 18 inches north of a wire fence on a stony knoll, and in line with a rail fence running northeast; monument diagonal to the line; heaved slightly, but plumb and in good condition.

No. 748 on the east side of a highway in front of an old building used as a store; 1 foot south of the door, and 8 feet out on the street; broken off close to the ground; bottom solid.

No. 749 on south edge of a knoll, the first high ground west of the road; heaved 6 inches; loose in the ground; leaning southwest 12 inches, and cracked on the southeast side.

No. 750 on the summit of a high rocky knoll in the remains of a stone fence; diagonal to the line; heaved slightly; leaning 3 inches south; cracked down the southwest side from the top 18 inches; pasture to the north and south.

No. 751 in low wet ground at the foot of a ridge, 320 feet, more or less, west of a fence running south; very loose; leaning north 12 inches; heaved 5 inches; small hole in the north side 2 feet from the top; on the north side of a rail fence; grove of maples on ridge to the west.

No. 752 on the east side of road leading north from Ft. Covington; leaning 5 inches east; solid in the ground, and in good condition.

No. 753 in wire fence in low wet land; heaved 18 inches; very loose, plumb, and in good condition.

No. 754 near the centre of the main street of Dundee; broken off close to the surface; buildings to the east and west on line.

No. 755 broken off 6 inches below the surface by ice; on northeast side of road along west bank of Salmon river; top now lying on the east side of the road.

No. 756 about 300 feet west of the east edge of Dundee swamp; on the south side of winter road, and about 65 feet west of a rail fence running south; diagonal to line; heaved 18 inches; leaning southeast about 3 feet; in perfect condition.

No. 758 in Dundee swamp 15 feet south of the winter road; heaved 12 inches; leaning 36 inches west, but in good condition.

No. 758 near the southwest corner of clearing on Tyo's island; some stones around the base; very loose; leaning southwest 2 feet; heaved 1 foot; in perfect condition; diagonal to the line.

No. 759, 1,120 feet west of Pyke's creek; was found lying on the ground beside the fence; no evidence as to its position on line.

No. 760 on the northeast side of a road which comes up to the boundary from the south and extends west along the boundary for a short distance, and thence northwesterly into Canada; post at the west end of a stone wall from the east along line; leaning 36 inches northwest; solid in the ground, and in perfect condition.

No. 761, 2 feet north of a wire fence in low swampy ground; cleared land to the north, but many stumps south of the line; about 200 feet west of an ash and elm swale, and is nearly north of Hollinbeck's house; heaved 15 inches; very loose in the ground, but in perfect condition.

No. 762 on high land between two swamps; 22 feet east of a wire fence running south; very loose; heaved 10 inches; leaning northwest 5 inches; diagonal to the line; cleared land to the north and south.

No. 763 in dense wet alder swamp, 596 feet west of the easterly limit thereof; was very difficult to find.

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No. 764 on easterly slope of hardwood ridge; leaning 1 inch south, and 1 inch east; in good condition; about 500 feet west of the alder swamp.

No. 765 about 80 feet east of a water course; in a low wet meadow; willow bushes along the line 200 feet to the west, but no indication of the line to the east for 500 or 600 feet, thence a wire fence; post heaved 12 inches; about 2 feet of the top broken off and missing.

No. 766 in a line of willow bushes; land cleared on both sides; leaning 8 inches east, but solid in the ground, and in good condition.

No. 767; land cleared on both sides of the line; no fence; line indicated by bushes; post about 800 feet south of a yellow house on the highway; leaning 18 inches north-west; solid in the ground, and in good condition; cleared land extends about 600 feet along the line west of the post; thence thick second growth to the north and south.

No. 768 in southwest angle of a small clearing surrounded by brush; leaning 8 inches west and 6 inches north; solid in the ground; in perfect condition, and diagonal to the line; about 500 feet southwest of a small house in a pine grove.

No. 769 on summit of first ridge east of St. Regis river, in grove of small hickory and oak; heaved 2 inches; leaning 4 inches south, and in perfect condition.

No. 770 formerly on east bank of St. Regis river; has disappeared.

No. 771 on the main street of St. Regis, 6 feet southeast of a wire fence, leaning south and east 2 inches; slightly loose in the ground; heaved 3 inches; diagonal to the line; has been turned around 180 degrees. Running Deer's house on the east side of the street, and a small building on the west side, are on the line.

No. 772 on high ridge just outside and west of the village of St. Regis; heaved 8 inches; leaning 6 inches east, and in perfect condition.

No. 773 on high ground about 4 feet northeast from old log stable; heaved 8 inches; solid in the ground; leaning west 3 inches and north 12 inches; condition perfect.

No. 774 formerly stood on the bank of the St. Lawrence river. The Indians say that this post has not been seen for many years.

In connection with the above description of the condition of the monuments at the time of our examination of 1901, it is of interest to refer to the results of the joint examination of this line which was made in 1890. In the following table a comparison is made in case of a few monuments:—

Number	Condition in 1890.	Condition in 1901.
670	Heaved 6 inches, loose though plumb.	Heaved 15 inches, very loose.
671	Firm, but leaning slightly north-east.	Heaved 18 inches; piece broken out about 3 feet from top.
679	Heaved 1 foot, loose and leans south.	Heaved 2 feet, very loose.
683	Post plumb and firm.	Heaved 3 inches, leaning slightly east and north.
685	In hard ground, plumb and firm.	Heaved 12 inches, quite loose in ground, turned in hole; badly cracked on east side.
686	Plumb and firm.	Heaved 10 inches, quite loose, leaning 6 inches east and south. Piece 6 inches long broken out of north side.
699	Plumb and firm, in hard ground.	Heaved 6 inches, leaning 6 inches south.
700	Plumb and firm in ground.	Heaved 8 inches, leaning 10 inches south and loose in ground.
756	Leans a little south-east, but is firm.	Heaved 18 inches, leaning south-east about three feet.
762	Plumb and firm.	Very loose, heaved 10 inches and leaning 5 inches west.

From this we may infer that in another decade many of the posts which we found standing would be entirely out of the ground, and as many of the monuments indicated deflection angles, their re-location would be somewhat difficult. The monuments were not placed below the frost line, and the thickness of the shell was exceedingly irregular,

varying from 5-16 to 3-4 of an inch. The action of the frost in the spring drew the post, and the irregular expansion and contraction during extreme temperature cracked the shell.

Originally there were one hundred and thirty monuments set on the section of the line between the Richelieu and St. Lawrence rivers. Erosion of the easterly banks of the St. Regis and St. Lawrence rivers has destroyed the sites of Nos. 770 and 774, and the construction of a dam on Trout river has inundated the site of No. 734, and these monuments have disappeared.

In summing up the above notes of our examination, we may give the following general statement:—

In perfect condition (No. 646).....	1
Heaved, leaning, loose or altogether out of the ground, but in good condition.....	83
Solid, plumb and perfect.....	9
Cracked, broken, or missing.....	37
	<hr/>
	130

The above is sufficient demonstration of the necessity of renewing the monuments set in 1845. Ten only out of one hundred and thirty were found in perfect condition.

The decision of the Commissioners, under the Treaty of Washington, as to the size and weight of monuments to be used was, no doubt, largely influenced by lack of facilities for transport. Railways and excellent highways now cross and recross the line, and modern conditions prevail.

In reporting to you the results of our examination, we expressed the opinion that the size and weight of the existing monuments were insufficient. Apart from their want of permanency, and the difficulty experienced in finding them, their diminutive appearance seemed altogether out of keeping with the importance of the line which they were intended to mark. The international boundary between Canada and the United States should be marked more conspicuously and permanently than by small cast-iron posts.

We observed that there were several railways and a number of highways crossing the line without any mark at the point of intersection. It was noticed that at several places along the line, high ridges occur between the posts. New monuments at road crossings (eleven in all) appeared necessary, and also some five new monuments at intervening points.

In our report we felt unable to advise any material expenditure having for its object the perpetuation of the existing monuments; that is, the ninety-two which were in perfect condition. The cost of scraping, painting and resetting would, perhaps, be about twelve or fifteen dollars each. Although intact, the irregularity in the thickness of the metal would be a constant menace to their stability, and we could offer no satisfactory method of augmenting their strength. Concrete filling was considered, but the question of unequal expansion and contraction would still exist, perhaps to a greater extent, through the introduction of a core having a different and comparatively unknown co-efficient of expansion.

Thirty-six of the existing monuments in any case would have to be replaced by new ones; apart from the additional sixteen at road crossings and intervening ridges.

The visible line, as located under the provisions of the Treaty of Washington, 1842, consisted of an opening in the forest thirty feet wide on the ground, with monuments at deflection and intermediate points. At isolated places the depression in the sky line of the timber is still plainly visible. But there are long sections of second growth where there is not the slightest indication of the position of the line. Where the land is cleared and cultivated, trees and brush have grown up along the fences, so that under present conditions it is almost impossible to see from any one monument to another.

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We called your attention to the fact that in the case of the missing monuments, a resurvey of more or less extent would be necessary to replace them, and should you decide to build new monuments throughout, a rigorous instrumental survey of the whole line could be made at the same time at comparatively small additional expense. The plan and field notes of such survey would be of great value to both countries. They would effectually perpetuate the many governing points which indicate deflections along the line now established as the boundary between the province of Quebec and the state of New York. The lengths of the tangents range from twenty thousand seven hundred to twenty-three hundred feet, and the deflection angles from a few minutes to several degrees of arc.

You having decided to erect granite monuments along the whole extent of the line, and having awarded to a firm at Hardwick, Vermont, the contract for their construction and their delivery at certain convenient railway stations by March 1, 1902; your representatives, previous to their delivery, met at Hardwick for the purpose of inspecting and accepting the monuments on your behalf.

In May, we were further directed to make preliminary arrangements for the field work of the renewal of all the monuments from the Richelieu to the St. Lawrence river, and of a rigorous instrumental survey.

We met at Three Rivers, and made out statement of the number of men required, the tools necessary for the rebuilding of monuments, and the instruments to be furnished by each country for the purpose of carrying on the survey, and at once submitted them for your approval. We were then directed to commence the work as soon as possible.

On the evening of the 3rd of June, the Commissioner for Canada and your representatives met at Rouse's Point. We at once began assembling material for the monuments, arranging for labourers, and in every way preparing for carrying out your instructions speedily and successfully.

It was supposed that the monument building would not progress as rapidly as the survey, consequently at the beginning our energies were directed toward that branch of the work, and the first monument (No. 647) was built on June 9.

Water to the depth of five or six feet covered the site of No. 645, which was left until later in the season. After several days' experience, we found that this work could be carried on efficiently with the following staff:—

Foreman (expert concrete worker)	1
Teamsters	2
Stone breakers	2
Labourers	3

The new monuments were located and constructed as follows: Where there was no doubt as to the old monument being in its true position, it was first referenced by intersection hubs, east, west, north and south. These hubs projected 12 inches, and were so placed that cords stretched between nails on their tops passed exactly six inches east and north of the centre of the old monument. The old monument was then removed, a hole three feet square (properly placed) was excavated to the depth of about four feet six inches.* Concrete mixture, one part Portland cement, two parts clean sharp sand, and five parts broken stone, properly rammed, was used to fill the excavation to within three inches of the surface of the ground. The cords were placed in position, and the monument adjusted thereto, and kept in place by guys attached to an iron collar which fitted over the pyramidal top. A form three feet square inside and twelve inches high was then carefully placed at right angles to the line and the concrete carried up to its top.

*Where soft marshy ground was encountered, the hole was excavated to a sufficient depth to secure a solid foundation; where ledge rock occurred, all loose material was removed, and the site washed and roughened, in order to secure a proper bond.

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This portion of the base was finished with a mixture of one part cement and one part of sand, the top having an outward slope of about one in ten. While 'setting' was in progress, brass plates with inscriptions of bevelled projecting letters were placed in position on top, and kept there until a perfect impression was obtained. Twenty-four hours after the form was removed and the exposed surfaces given a brush coat of Portland cement grout.

In addition to replacing the original monuments, sixteen new monuments were erected as follows:—

No. 650 A.—In a rail fence on top of a high ridge, between monuments 650 and 651. This point is visible for many miles from the east.

No. 651 A.—On the easterly side of a highway, between Nos. 651 and 652.

No. 652 A.—In pasture land, on a summit between monuments 652 and 653.

No. 657 A.—On the westerly side of a highway leading north into Canada, and between Nos. 657 and 658.

No. 663 A.—On the east side of a highway crossing the line, between monuments 663 and 664.

No. 665 A.—On the right of way of the Grand Trunk Railway, and near the westerly limit thereof.

No. 674 A.—On a high ridge, between Nos. 674 and 675. Cultivated land on both sides of line.

No. 676 A.—On the easterly side of a highway, crossing the line between monuments 676 and 677.

No. 678 A.—In cleared land, on high ground, between 678 and 679.

No. 679 A.—On summit of a rocky ridge, in second growth timber, between monuments 679 and 680.

No. 695 A.—On the west side of the north section of the Clinton Mill's road, between numbers 695 and 696.

No. 699 A.—On the west side of the Churubusco road, about five hundred and seventy feet east of No. 700.

No. 706 A.—On the east side of McCann's road, between 706 and 707.

No. 722 A.—On the west side of Jameson's road.

No. 727 A.—On a sand knoll just east of the easterly limit of the right of way of the Mohawk and Malone branch of the New York Central Railway.

No. 751 A.—On the westerly limit of the right of way of the Grand Trunk Railway.

All new monuments were placed on the line joining the two nearest original monuments.

Where deflection angles occurred, the original monuments were placed diagonally, and in the original notes were called angular monuments. In accordance with your instructions, the new monuments were placed at right angles to the line.

Monument No. 734, previously referred, was not rebuilt. No. 754, which originally stood in the centre of the main street of Dundee, was erected eleven and forty-eight hundredths feet west of the bottom of the old monument, which was left in place. No. 770, formerly on the east bank of St. Regis river, was placed about ten feet east of the highway, which runs nearly parallel to the river, a short distance back from the east bank.

Monument 774, which formerly stood on the bank of the St. Lawrence river, has been carried away by erosion. The new monument was erected about 100 feet east of the present bank.

In those cases where, as previously explained, two monuments had been set on line, to indicate an astronomical station, we did not consider it necessary to place more than one new granite monument.

Monument No. 645, in the Richelieu river, was rebuilt in October at the close of our season's work. We measured easterly from No. 646, the distance given in the original notes, and found the stone foundation referred to in the report of the survey of 1845.

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Owing to the fact that water covered the site to a depth of two feet, we constructed a cofferdam six feet square. A hole three feet square was excavated nine feet below the surface of the water before we obtained a solid foundation.

The concrete was carried up to within six inches of the surface of the water before the monument was placed thereon. The base was constructed in the same manner as that of the other monuments, and when completed its top projected six inches above the surface of the water. The space between the base and the cofferdam was filled with gravel well rammed.

The other branch of the work—the survey—was conducted in the following manner:—

This section of the boundary line, as located under the Treaty of Washington, consists of a series of tangents of different lengths, and of deflection angles irregular as to direction and magnitude. As the line passes through an inhabited country, and at many points buildings and orchards are on and along the line, it was imperative that we should place our survey lines near the boundary, and have as few tangents as possible, in which we were fairly successful.

Thus we were compelled to adopt a system of survey which consisted of a succession of straight lines of different courses, and in order to secure the best possible results as regards azimuth especially, these lines were so placed as to obtain the maximum length without departing materially from the original line.

When organized, our survey party consisted of the following:—

Assistant surveyors.....	1
Chainmen.....	4
Axemen.....	5

Office computations, based on the original notes, determined the position and direction of our tangents or transit lines. On the ground these lines were run in accordance with modern precision methods. The position of each monument was referred rectangulary to our transit line. Two independent measurements were made with narrow steel tapes. The leading chainman used a tape sixty feet long, and recorded the distance from monument to monument only; the check chainmen used a tape one hundred feet long, and continued their measuring throughout, noting the distance to each monument, and leaving marked stakes at hundred-foot intervals. Temperatures were recorded, and every care exercised in carrying on this part of the work. Where differences between the two recorded distances were appreciable new measurements were made.

The copy of the original notes which accompanied our instructions aided us materially in carrying on the work. As the survey progressed, it was found that the alignment of the original monuments between the diagonal monuments or deflection points was good, although errors were found in the deflection angles given in the notes.

It was a matter of current report that certain monuments, namely, Nos. 659, 719, 721 and 743 had been moved from their original positions by unauthorized persons. Our survey showed, however, that the first of these was only 4½ inches from the true line, and No. 719 was exactly on line. Nos. 721 and 743 proved to be 3'39 feet and 4'41 feet, respectively, off line. No. 743 also was found to have been moved easterly a distance of 53'81 feet, and, as will be seen from the notes we have given of our examination of the monuments, was completely loose in the hole, and turned partly round. The discrepancies in the positions of these two monuments were much greater than any others found, and far beyond the range of accidental error of line running or monument setting in the original survey. Our survey shows the probable error of the placing of an original monument to be not more than two or three inches. This was considered by us to be corroborative of the rumoured displacement, and we set the new monuments on the true line: No. 721, 3'39 feet, and No. 743, 4'41 feet south of where we found the old posts. No. 743 was also moved westerly 53'81 feet.

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The astronomical observations, consisting of the determining of the azimuths of the transit lines, and of the latitude of certain points, were unavoidably delayed until the latter part of the season. Most unfavourable climatic conditions were encountered, and only about one-half of the necessary observations were secured. Azimuth station No. 5, near the Churubusco road, marked the westerly termination of this work. The report in connection therewith will be made when observations are completed.

Field notes of our survey in duplicate will be elaborated during the winter season, and submitted for your approval.

H. P. WILLIS,
Representing the Commission for State of New York.

C. A. BIGGER,
Representing the Commission for Canada.

APPENDIX No. 2.

STATE OF NEW YORK,
OFFICE OF THE STATE ENGINEER AND SURVEYOR,
ALBANY, May 9, 1899.

Boundary Line Monuments.

SURVEYOR-GENERAL,
Department of the Interior, Technical Branch,
Ottawa, Canada.

I beg leave to call your attention to the law relating to the monuments marking the boundary lines of our state, a copy of which I enclose. This law requires that an examination and inspection of the boundary line monuments shall be made during the present year, and I earnestly solicit your co-operation with us in such examination and inspection.

We now have an appropriation for this purpose, and would gladly put the necessary party in the field, to co-operate with such persons as are designated by your department, on short notice, if you will let me know what your wishes are in the matter.

EDWARD A. BOND,
State Engineer and Surveyor.

APPENDIX No. 3.

DEPARTMENT OF THE INTERIOR,
TOPOGRAPHICAL SURVEYS BRANCH,
OTTAWA, May 15, 1899.

EDWARD A. BOND, Esq.,
State Engineer and Surveyor,
Albany, N.Y., U.S.A.

I have the honour to acknowledge the receipt of your letter of the 9th instant, inviting the co-operation of our Government in the examination and inspection of the monuments marking the boundary line between Canada and the state of New York. I have submitted your invitation for instructions, and will advise you later.

E. DEVILLE,
Surveyor-General.

APPENDIX No. 4.

STATE OF NEW YORK,
OFFICE OF THE STATE ENGINEER AND SURVEYOR,
ALBANY, March 2, 1900.

Hon. E. DEVILLE,
Surveyor-General, Dept. of Interior,
Topographic Survey Branch, Ottawa, Canada.

From May 15 to June 30, 1899, we held some correspondence in relation to the examination of the monuments marking the boundary line between Canada and the state of New York. Our law stipulates that the State Engineer and Surveyor shall make an examination of the state boundary monuments once in three years. The time has arrived when the monuments between Canada and the state of New York, by the terms of our statute, should be examined.

It would please me very much if a representative of your Government could take this matter at the same time, so that each party will know of any defective monuments, and also know of any repairs to monuments that ought to be made.

I shall be very glad if you will take this subject up with the proper parties, and let me know at an early date what the possibilities are of co-operation by your department with ours in this examination.

EDWARD A. BOND,
State Engineer and Surveyor.

APPENDIX No. 5.

EXTRACT from a Report of the Committee of the Honourable the Privy Council, approved by His Excellency on the 26th of May, 1900.

On a report dated 12th May, 1900, from the Acting Minister of the Interior, stating that he has received a communication from the State Engineer and Surveyor of the state of New York, stating that he is required under their law to make every three years an examination of the monuments marking the boundary of his state, and that the time for the periodical examination is at hand, and asking the co-operation of the Government of Canada so far as regards that portion of the state boundary which coincides with the boundary of the Dominion:

The Minister observes with regard to this proposition that it looks to a mere examination of the monuments, and not the repair or replacing of those broken or lost. This last would be out of the power of the state of New York or of Canada, either separately or jointly without an international agreement with the United States. Without power to replace, the examination would appear to be of little service to the Dominion. For this reason, he (the Minister) is unable to recommend compliance with the State Engineer's request.

The Minister would, however, call attention to the general question of which this is a part, namely, the examination, and where necessary, the remarking of the whole of the southern boundary of Canada, wherever it has been surveyed by the various

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commissions appointed for that purpose. The portions of the boundary line which have been so marked are:—

From the St. Croix to the St. Lawrence river, separating the provinces of New Brunswick and Quebec from the states of Maine, New Hampshire, Vermont and New York; this line was surveyed under the Ashburton Treaty of 1842, and marked with cast-iron monuments.

From the Lake of the Woods to the Rocky Mountains (49th parallel), separating Manitoba and the North-west Territories from the states of Minnesota, North Dakota and Montana; surveyed 1872 to 1874 and marked, in part with iron monuments, in part with earth or stone mounds.

From the Rocky Mountains to the Straits of Georgia (49th parallel), separating British Columbia from the states of Montana, Idaho and Washington; surveyed 1859 to 1861, and marked with mounds and iron posts.

As regards all these portions of the line many complaints have been made from time to time of the disappearance of monuments, and the consequent difficulty of determining the exact position of the boundary, while the British Columbia portion of the line was, in November, 1892, the subject of a formal request by the Lieutenant Governor in Council for not only a re-establishment of lost posts but also for an additional or supplementary survey, on the ground that the demarcation by the Commissioners was not sufficiently complete for modern requirements.

Again, the boundary line between Ontario and Minnesota, between Lake Superior and Lake of the Woods, has been designated by the Commissioners under the Treaty of Ghent, and by the Ashburton Treaty, by description and maps only, and the line (which in general follows the water communication) has never been marked where it crosses the portages.

The Minister submits that while this question was one of those before the Joint High Commission, it is yet essentially different from the other questions before that Commission, as it involves no cession of territory or relinquishment of rights on either side, but is a matter purely of business arrangement to the mutual advantage of both countries.

The Minister, therefore, recommends that Your Excellency be moved to inform Her Majesty's Government of the desire of the Government of Canada to join with the United States in an examination of their common boundary for the purpose of re-establishing lost monuments and of placing such supplementary monuments as may appear necessary to meet modern requirements.

The Committee advise that Your Excellency be moved to transmit a certified copy of this Minute to the Right Honourable the Secretary of State for the Colonies.

All which is respectfully submitted for Your Excellency's approval.

JOHN J. McGEE,

Clerk of the Privy Council.

APPENDIX No. 6.

STATE OF NEW YORK,
OFFICE OF THE STATE ENGINEER AND SURVEYOR,
ALBANY, October 23, 1900.

New York-Canada Boundary Monuments.

Hon. JOHN HAY,
Secretary of State,
Washington, D.C.

By the laws of the state of New York, it devolves on the State Engineer and Surveyor to once in three years examine all of the boundary monuments of the state, and

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report to the legislature their condition, and in connection with this work I have had the boundary monuments between Canada and the state of New York examined this past summer.

Of a total of 130 monuments I find only 37 in perfect condition. I find four are missing; 13 are broken, or have pieces broken off; 8 have fallen down; 5 have cracked; 39 have been heaved by action of the frost; 24 lean: that is, are not plumb. Of these, some of them are firm and others loose.

I would be glad if you would tell me what is best to be done to induce the Canada government to join, either with the government of the United States or with our state, to have these monuments replaced and put in proper and first-class condition.

If your department will take it up with the Canadians, I shall be very glad; but, if not, and they will assent to joining my department in adjusting this matter, we will gladly attend to it.

If I have not addressed the right department, I would appreciate it very much if you would have this letter referred to the proper parties.

EDWARD A. BOND,
State Engineer and Surveyor.

APPENDIX No. 7.

DEPARTMENT OF STATE,
WASHINGTON, October 29, 1900.

EDWARD A. BOND, Esquire,
State Engineer and Surveyor,
Albany, New York.

I have to acknowledge the receipt of your letter of the 23rd instant in relation to the condition of the boundary monuments between the state of New York and the Dominion of Canada.

I have submitted the matter to the British ambassador, with a view to ascertain whether the Canadian government will be willing to join in the replacing and repair of the monuments. As a new survey is not involved but simply the repair of existing monuments, it would not seem to require any new convention, but merely provision on both sides for the joint performance of the work.

JOHN HAY.

APPENDIX No. 8.

EXTRACT from a Report of the Committee of the Honourable the Privy Council, approved by His Excellency on the 5th January, 1901.

The Committee of the Privy Council have had under consideration a copy of a despatch, hereto attached, dated 1st November, 1900, from Her Majesty's Ambassador at Washington, transmitting a copy of a note from the Secretary of State of the United States, inquiring whether the Government of Canada is willing to join in having the monuments upon the boundary line between Canada and the state of New York put in proper and first-class condition.

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The Minister of the Interior, to whom the matter was referred, observes that Your Excellency's Government has already, by Minute dated 26th May, 1900, expressed its willingness and desire to join with the Government of the United States in the examination and repair of monuments upon the boundary between Canada and the United States.

The Minister further states that the occasion for the above mentioned Minute was an invitation on the part of the authorities of the state of New York to the Government of Canada to join with them in an examination of the northern boundary of their state, where it abuts upon the province of Quebec. This proposal Your Excellency's advisers declined to accede to, for the reason that the mere examination of the monuments would not serve any very practical end, unless provision were made for the restoration of lost or broken monuments, a matter which could not be dealt with except with the consent and co-operation of the Government of the United States.

The Minister further states that this objection is not set aside by the note of the United States' Secretary of State. Although the note indicates the agreement of the United States as regards only a small part of the work proposed by Your Excellency's Government, and a more extended agreement would be more satisfactory, he is of the opinion that concurrence in the limited proposal is in the public interest.

The Minister further observes that it appears that of 130 monuments originally placed on the New York boundary, 37 are now in first class condition, whereas in 1890 an examination of this line by an officer of the Department of the Interior showed 51. The rapid deterioration of the monuments thus apparently not only calls for early action towards their restoration, but also indicates the probable condition of the monuments on the prolongation eastward of this line, north of the states of Vermont, New Hampshire and Maine, and suggests the advisability of action there also.

The Committee on the recommendation of the Minister of the Interior, advise that Your Excellency be moved to inform Her Majesty's Ambassador at Washington that the Government of Canada is willing to join with the Government of the United States in the examination and restoration where necessary of the monuments along the line between the province of Quebec and the state of New York, but desires to suggest that the scope of the proposed joint operations be enlarged so as to cover the whole of the boundary line, which was marked under the Webster-Ashburton Treaty, from the St. Lawrence to the St. Croix river.

All which is respectfully submitted for Your Excellency's approval.

JOHN J. McGEE,

Clerk of the Privy Council.

APPENDIX No. 9.

STATE OF NEW YORK,

EXECUTIVE CHAMBER,

ALBANY, August 5, 1901.

Hon. E. A. BOND,

State Engineer,

Albany, N.Y.

The inclosed letter from the Department of State at Washington is forwarded to you for your information.

B. B. ODELL, JR.

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APPENDIX No. 10.

DEPARTMENT OF STATE,
WASHINGTON, August 3, 1901.

His Excellency,
the Governor of New York,
Albany.

I have the honour to acknowledge the receipt of your letter of the 23rd ultimo, inclosing one to yourself from the State Engineer of New York, requesting to be put in direct communication with the proper officials of the government of the Dominion of Canada, for the purpose of undertaking at once, conjointly with them, the placing of new monuments to mark the boundary between the State and the Dominion.

As Mr. Bond is aware, the department submitted to the British embassy his suggestion, that this matter be undertaken now without first waiting until the states of Vermont, New Hampshire and Maine should also have agreed to mark anew their respective boundaries with Canada. To that note no reply has yet been received; and until a favourable answer is given, this department thinks it is hardly in a position to bring the engineers of New York and Canada into direct communication for the purpose stated. But it will be glad to do so when the proper time shall have arrived.

ALVEY A. ADEE,
Acting Secretary.

APPENDIX No. 11.

EXTRACT from a Report of the Committee of the Honourable the Privy Council, approved by His Excellency on the 16th August, 1901.

The Committee of the Privy Council have had under consideration a despatch, hereto attached, dated July 17th, 1901, from His Majesty's Chargé d'Affaires at Washington, transmitting a copy of a note from the Secretary of State of the United States having reference to the condition of the monuments on the boundary between Canada and the state of New York, and suggesting that in view of the simplicity of the task of executing the necessary repairs, these would be carried out by the direct co-operation of the Department of the Interior of Canada with that of the Engineer of the state of New York, without awaiting the conclusion of any future agreement between His Majesty's Government and the United States Government for the more effective demarcation of the frontier.

The Minister of the Interior, to whom the said despatch was referred, submits that the proposed co-operation with the state of New York, with the concurrence of the Government of the United States, is quite in accord with the views expressed by His Excellency's advisers in the Minutes of Council of the 26th May, 1900, and 5th January, 1901, although the scope of the proposed operations is restricted to the limits of the state of New York, and, as set forth in these Minutes, an inquiry into the condition of the whole land boundary between the United States and Canada is to be desired.

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The Committee advise that His Excellency be moved to inform His Majesty's Chargé d'Affaires at Washington of the concurrence of the Government of Canada with the proposal of the Secretary of State of the United States, it being understood that the agreement to the proposed co-operation is without prejudice to any further agreement between the two governments for the more effective demarcation of the existing treaty boundary in that quarter, and that, while each government shall pay the expenses of its Commissioner and surveyors, the actual cost of repairs shall be equally divided.

All which is respectfully submitted for His Excellency's approval.

JOHN J. MCGEE,
Clerk of the Privy Council.

APPENDIX No. 12.

Mr. Lowther to Lord Minto.

BRITISH EMBASSY,
NEWPORT, R.I., July 17, 1901.

His Excellency,
The EARL OF MINTO, G.C.M.G.

With reference to Lord Pauncefote's despatch, No. 3, of January 12 last, I have the honour to transmit to Your Excellency herewith a copy of a further note from the United States Government, drawing attention to the danger of the obliteration of the boundary between Canada and the state of New York through the dilapidation of the monuments, and suggesting that, in view of the simplicity of the task of executing the necessary repairs, it should be carried out by the direct co-operation of the Department of the Interior of Canada with that of the Engineer of the state of New York, without awaiting the conclusion of any further agreement between His Majesty's Government and the United States Government for the more effective demarcation of the frontier, such as that which, it is hoped, may result from the survey suggested by the latter last January and communicated to Your Excellency in Lord Pauncefote's despatch, No. 13.

I should be grateful if Your Excellency would be good enough to inform me what answer I should return to the proposal of the United States Government.

GERARD LOWTHER.

APPENDIX No. 13.

DEPARTMENT OF STATE,
WASHINGTON, July 15, 1901.

Mr. GERARD A. LOWTHER.

I have the honour to inform you that the department is in receipt of a letter from the Governor of New York, dated the 14th ultimo, in which he says that the State Engineer has called his attention to correspondence that the latter has had with the Department of the Interior of the Dominion of Canada in relation to replacing and

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repairing the monuments that mark the boundary line between the state of New York and the Dominion of Canada. The State Engineer informs the Governor that the monuments are in such a fragile and broken condition that unless they are replaced very soon by more permanent ones the boundary line may be lost.

The Governor requests that the matter may be brought to the attention of the British Ambassador, with a view to having early action taken to repair and replace the dilapidated monuments.

In this connection I beg to recall to your attention the proposal contained in the department's note to Lord Pauncefote of October 29, 1900.

While the department still adheres to the view expressed in its note of January 29, 1901, in which it is gratified to see that the Government of the Dominion of Canada shares, that a general survey of the whole land and water boundary between the two countries, with a view to replacing lost monuments and erecting new ones, as well as determining by buoys or ranges, or both, the water boundaries in the narrow lake channels, is most desirable, the question presented on the New York boundary is of so simple a nature that it is conceived that no difficulty will be found in carrying out, forthwith, the suggestion of the Governor of the state. There is no question of settling any dispute arising from the total disappearance of old monuments or the insufficient marking of the line by the treaty Commissioners. It is merely a matter of repairing existing line marks, as to the situation of which no question or doubt can arise.

It is not thought that an international convention would be necessary to provide for painting iron monuments, cementing the defective masonry of stone monuments, restoring inscriptions obliterated by exposure to the elements, or, in short, executing all such mere repairs as may be needful to enable the line marks to subserve the purpose for which they were set up. All this can be done by the joint action of the appropriate agents of the Engineer's Department of the state of New York and of the Department of the Interior of Canada, without prejudice to any future agreement between the two governments for the more effective demarcation—if need be—of the existing treaty boundary in that quarter.

It is hoped that an early and favourable consideration may be given to this proposal.

JOHN HAY.

APPENDIX No. 14.

Lord Pauncefote to Lord Minto.

BRITISH EMBASSY,
WASHINGTON, January 12, 1901.

His Excellency
THE EARL OF MINTO, G.C.M.G.,
The Governor General.

I have the honour to acknowledge the receipt of Your Excellency's despatch, No. 6, of the 9th instant, inclosing a copy of an approved Minute of the Privy Council for Canada, intimating the willingness of the Canadian Government to join with the Government of the United States in the examination and restoration, where necessary, of the monuments along the line between the province of Quebec and the state of New York, but suggesting the extension of the proposed joint operations so as to include the whole of the boundary line marked under the Webster-Ashburton Treaty, from the St. Lawrence to the St. Croix river.

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I have forwarded the Minute to the United States Government, with the request that I may be informed of their views on the suggestion therein contained for communication to Your Excellency.

PAUNCEFOTE.

APPENDIX No. 15.

STATE OF NEW YORK,
EXECUTIVE CHAMBER,
ALBANY, September 2, 1901.

Hon. E. A. BOND,
State Engineer,
Albany, N.Y.

I am directed by the Governor to refer the inclosed communication to you for your consideration.

JAS. G. GRAHAM,
Secretary to the Governor.

APPENDIX No. 16.

DEPARTMENT OF STATE,
WASHINGTON, August 30, 1901.

His Excellency
The Governor of New York,
Albany.

Referring to your letter of the 23rd ultimo, I have now the honour to inform you that on the 25th instant the British Chargé d'Affaires *ad interim* advised me that the Privy Council of Canada concurred in your proposal that the restoration of defective monuments marking the boundary between New York and Canada be proceeded with under the joint direction of the State Engineer of New York and the Canadian Department of the Interior, without awaiting the conclusion of a more formal agreement between this Government and that of Great Britain.

The Canadian Government wishes it to be understood, however, that this agreement is without prejudice to any further measures which may be taken for the demarcation of the boundary between the two countries, and that, while each government shall pay the expenses of its Commissioner and surveyors, the actual cost of restoring the monuments shall be equally divided.

I would now request you to put the State Engineer of New York in direct communication with the Canadian Department of the Interior.

ALVEY A. ADEE,
Acting Secretary.

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APPENDIX No. 17.

STATE OF NEW YORK,
OFFICE OF THE STATE ENGINEER AND SURVEYOR,
ALBANY, September 4, 1901.

Hon. B. B. ODELL, Jr.,
Governor, State of New York,
Albany, N.Y.

I am in receipt of your letter of September 2, inclosing a letter from Hon. Alvey A. Adee, Acting Secretary, in relation to the examination and repair of boundary monuments between New York and Canada, and have taken up the subject with the Canadian Department of the Interior, as suggested in Mr. Adee's letter.

EDWARD A. BOND,
State Engineer and Surveyor.

APPENDIX No. 18.

STATE OF NEW YORK,
OFFICE OF THE STATE ENGINEER AND SURVEYOR,
ALBANY, September 4, 1901.

Examination and Repair of Boundary Line Monuments.

Hon. E. DEVILLE,
Surveyor-General, Department of the Interior,
Ottawa, Canada.

You will doubtless recall some correspondence which we had recently with relation to the examination and repair of monuments marking the boundary line between the Dominion of Canada and the state of New York.

During the present year the matter has been the subject of correspondence between the Governor of this state, the Secretary of State at Washington and the representatives of your government, and I am now in receipt of a letter under date of August 30, 1901, from Hon. Alvey A. Adee, Acting Secretary of State (a copy of which is herewith inclosed) transmitted to me by Governor Odell.

In accordance with the suggestion contained in the letter above mentioned, I have the honour to call your attention to this matter, hoping that arrangements can be perfected so that the examination and repair of these monuments can be made at as early a date as possible, especially in view of the fact that the season in which outdoor work can be conducted is now rapidly drawing to a close.

My understanding is that each government shall pay the expenses of its engineers, while the actual cost of restoring the monuments shall be equally divided between the two governments.

In 1900 an agreement was entered into between the state of New York and the state of Pennsylvania for the examination and repair of monuments between the two states on similar terms, and in view of that fact I take the liberty of inclosing here-

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with a copy of that agreement, as I believe with such modifications as might be made necessary in paragraph 2 the general form of the agreement would cover the work contemplated in reference to the boundary line monuments between Canada and New York. I offer this merely as a suggestion, however, and will be glad to arrange the matter in such way as you desire either by formal agreement or by exchange of letters.

Awaiting your reply.

EDWARD A. BOND,
State Engineer and Surveyor.

APPENDIX No. 19.

EXTRACT from a Report of the Committee of the Honourable the Privy Council, approved by His Excellency on the 28th September, 1901.

On a report dated 17th September, 1901, from the Minister of the Interior, submitting with reference to the proposal that the Government of Canada should join with that of the state of New York in an examination of their common boundary, with a view to the restoration of destroyed or damaged monuments, that a communication has recently been received from the State Engineer and Surveyor of the state of New York, proposing that a formal working agreement as to the details of the work and a division of the expenses be entered into between the governments of Canada and the state of New York, or by officials designated by those governments; he submits, as a convenient form for agreement, the agreement entered into for a like purpose in the year 1900 between the states of New York and Pennsylvania.

The Minister, seeing no objection to an agreement of the character proposed, recommends that Mr. W. F. King, the Chief Astronomer of the Department of the Interior, who is familiar with this question, be appointed Commissioner to act with the officer who may be delegated by the state of New York, with authority to enter into an agreement of the character above mentioned, and to make arrangements for the commencement of field operations before autumn is too far advanced.

The Committee submit the same for His Excellency's approval.

JOHN J. McGEE,
Clerk of the Privy Council.

APPENDIX No. 20.

BRITISH EMBASSY,
NEWPORT, R.I., September 2, 1901.

His Excellency,
The EARL OF MINTO, G.C.M.G.,
The Governor General.

With reference to Your Excellency's despatch, No. 70, of the 20th ultimo, I have the honour to transmit herewith a copy of a note I have received from the United States Government.

Mr. Adee states that he has made known to the Government of New York the assent of Your Excellency's Government to the proposal that the restoration of the

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monuments on the boundary between New York and Canada be undertaken without awaiting the conclusion of a formal agreement between the governments of Great Britain and the United States, and Mr. Adee adds that he has asked the Governor to put the Engineer of the state in communication with the Canadian Department of the Interior.

GERARD LOWTHER.

APPENDIX No. 21.

DEPARTMENT OF STATE,
WASHINGTON, August 30, 1901.

Mr. GERARD LOWTHER.

I have the honour to acknowledge with gratification the receipt of your note, No. 232, of the 25th instant, informing me of the assent of the Canadian Government to the proposal of the Governor of New York that the restoration of the monuments on the boundary between New York and Canada be undertaken without awaiting the conclusion of a formal agreement between this Government and that of Great Britain.

I have made this known to the Governor of New York, and have asked him to put the Engineer of the state in communication with the Canadian Department of the Interior.

ALVEY A. ADEE,
Acting Secretary.

APPENDIX No. 22.

Whereas, by virtue of the provisions of chapter 421, of the Laws of the State of New York, the State Engineer and Surveyor is authorized and required, during the year 1887, and every third year thereafter, to cause to be made an examination and inspection of the boundary line monuments between that state and other states adjoining, and is further required to make a detailed report of such inspection and examination; and is further authorized and required to co-operate with the proper authorities of such adjoining states, in the examination and inspection and in the restoring and replacing of boundary line monuments, where they need to be restored or replaced, and is clothed with full authority to represent the state of New York in co-operating with other states in discharging the duties hereinbefore referred to regarding boundary line monuments; and

Whereas, similar duties are imposed upon the Secretary of Internal Affairs of the Commonwealth of Pennsylvania, by the Second section of the Act of the General Assembly, approved May 4, 1889, entitled 'An Act relative to the boundary lines and boundary line monuments,' directing his co-operation with the proper authorities in any of the adjoining states in re-establishing, by surveys, or otherwise, of the boundary lines, the erection of new monuments to mark their location, the repairing, resetting, or renewing of the old monuments when found necessary; and by virtue of said Act is fully empowered to represent and act for the Commonwealth of Pennsylvania, by the employment of such means as may be necessary in the premises, when from the reports of the county commissioners of said commonwealth or from other information

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satisfactory to him, it is found there is a necessity for the resurvey and relocation of said boundary lines, in whole or in part, or whenever any of the boundary line monuments are in such condition as to require resetting, replacing or renewing; and

Whereas, by virtue of the laws referred to in the two states named, the said state officers are required to co-operate with each other and act jointly in the examination and inspection, and, when found necessary, in resetting, replacing and renewing of monuments and in the re-establishing of the boundary lines between said states; and

Whereas, it appears from the examinations made in the years 1890 and 1893 that these monuments are displaced, in whole or in part, frequently by the action of frost, floods and by other causes, making their frequent examinations desirable to the end that they may be maintained in their proper position and condition; and it appearing that the welfare of the two states named will be conserved by examination and inspection of said boundary line monuments during the present year, and by virtue of the duties imposed upon the officers named by the respective states, as appears from the enactments in part recited; therefore,

It is agreed, by and between the undersigned, acting in conformity with the authority conferred, as hereinbefore stated, that L. K. Devendorf, representing the state of New York, under appointment made by Edward A. Bond, State Engineer and Surveyor of the state of New York, and J. Hermon Terry, representing the state of Pennsylvania, under appointment made by James W. Latta, Secretary of Internal Affairs of the said state of Pennsylvania, shall be empowered, and by these presents are hereby empowered, to cause to be repaired, reset and replaced any of the said boundary line monuments, which in their judgment may need to be so repaired, reset or replaced; and

It is further agreed that the parties herein named shall have full authority to represent the respective states in the discharge of the duties herein imposed, limiting the scope of their authority, however, to the examination of the boundary line monuments between the two states, and to the replacing and repairing of such monuments as in their opinion should be replaced, reset or repaired, and to the furnishing and setting of the new monuments where the old ones are so far mutilated and destroyed as to render them unserviceable; it being understood that in case the examination and inspection to be made shall disclose the fact that there is a necessity for the resurveying of any part of the said boundary line for the purpose of determining its location, the engineers appointed as aforesaid shall have no authority to make such survey, until they shall have first reported the conditions to the parties hereto, which conditions in their opinion render such a resurvey a necessity, nor until written authority signed by both of the parties hereto shall be given them authorizing such resurvey; and

It is further agreed that the engineers herein referred to, and appointed under the authority mentioned, shall proceed at once to the discharge of the duties as set forth, and shall diligently prosecute the work of examination and inspection and the discharge of the other duties to be done and performed, in order that the work shall be completed at as early a date as practicable; and

It is further agreed, that upon the completion of the work provided for in this agreement a full report shall be prepared of their operations, which report shall give in detail the location and condition of each monument and other interesting data pertaining thereto, as well as a statement of such action as may have been taken in regard to the same, such report to be made in duplicate, each to be signed by both engineers, one to be filed with the State Engineer and Surveyor of the state of New York, at Albany, and the other to be filed with the Secretary of Internal Affairs of the Commonwealth of Pennsylvania, at Harrisburg; and

It is further agreed, that the actual expenses incurred in the discharge of the duties herein referred to shall be borne equally by the two states in interest, except so far as may relate to the compensation of the two engineers referred to, which compensation is to be arranged by each state separately, and that all expenses be accounted

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for in verified statements, and, so far as practicable, supplemented by receipted vouchers from parties to whom disbursements have been made.

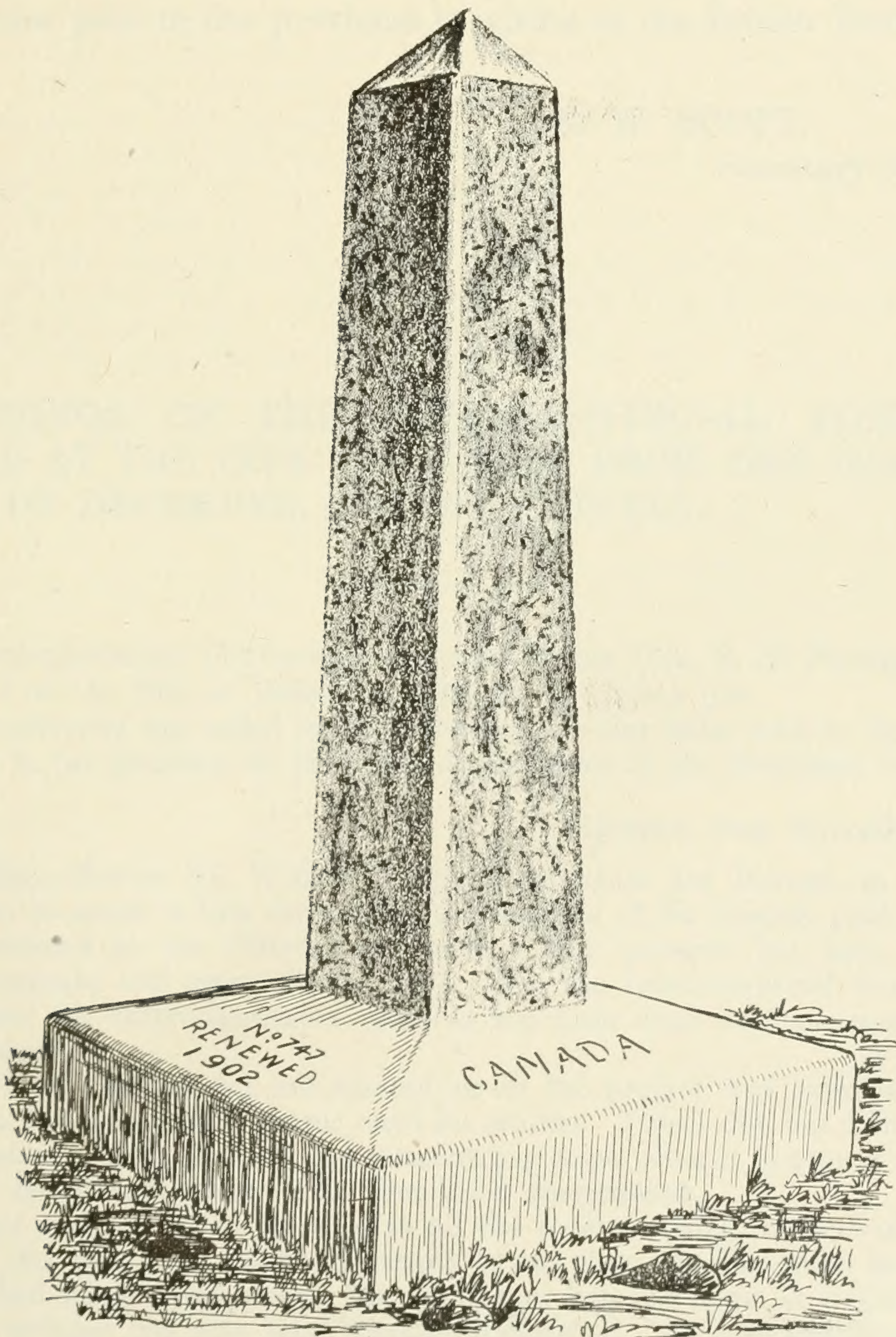
In witness whereof, Edward A. Bond, State Engineer and Surveyor of the state of New York, and James W. Latta, Secretary of Internal Affairs of the Commonwealth of Pennsylvania, have hereunto set their hands and caused the seals of their respective departments to be hereunto affixed, this 11th day of June, 1900.

EDWARD A. BOND,

State Engineer and Surveyor.

JAMES W. LATTA,

Secretary of Internal Affairs.



The American Medical Association is a non-profit corporation organized for the purpose of promoting the science and art of medicine and the health of the people. It is composed of members who are physicians, dentists, nurses, and other health care professionals. The Association's primary concern is the advancement of the medical profession and the improvement of the health of the community. It achieves this through its various departments, committees, and publications. The Journal of the American Medical Association is one of its most important publications, providing a forum for the dissemination of medical knowledge and the expression of professional opinion.

The Journal is published weekly, except during the summer months when it is published bi-weekly. It contains a variety of articles, including original research, clinical reports, reviews, and editorials. The Journal is also a platform for the expression of professional opinion and for the discussion of important medical issues. It is a valuable resource for all members of the medical profession and for the general public interested in medical progress.

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